

ABSTRACT

A light application mechanism applies light to the split electrode formation side of a semiconductor layer and an intermediate layer sensitive to radiation in an FPD, and change
5 in the effective sensitive area does not occur, so that fluctuations in the detection sensitivity of the FPD can be circumvented. As light application is continued still after incidence of radiation stops, occurrence of residual output can also be circumvented. Further, a light strength control
10 section controls the light application section so as to increase or decrease the strength of light applied by the light application section in response to a decrease or an increase in a gain setup value of an electric signal processing circuit, and the dark current component narrowing the dynamic range does
15 not widely occupy the output range of the electric signal processing circuit. Consequently, the dynamic range is not largely narrowed either.